

## **ABSTRACT**

A method of performing brain therapy may include placing a subject in a main magnetic field, introducing into the subject's brain a combination imaging and therapeutic probe, the probe including a magnetic resonance imaging antenna and an electrical energy application element, acquiring a first magnetic resonance image from the antenna of the combination probe, acquiring a second magnetic resonance image from a surface coil, combining the first and second magnetic resonance images to produce a composite image, positioning the combination probe within the brain with guidance from at least one of the images, and delivering electrical energy to the brain from the electrical energy application element of the combination probe thus positioned.